

IN THE CLAIMS:

Please amend the claims as follows.

1. (Currently Amended) A method of sending messages, the method comprising:

determining that an outbound message stored in a buffer has been unsuccessfully sent to a receiving agent more than a threshold number of times, wherein the buffer both stores an outbound message that has not yet been sent to the receiving agent and stores said unsuccessfully sent outbound message;

sending the receiving agent all outbound messages currently stored in the buffer; and

determining that all of said outbound messages have been successfully sent before any other outbound messages are sent to the receiving agent.

2. (Original) The method of claim 1, wherein an outbound message is successfully sent if a success confirmation message is received for the outbound message from the receiving agent, and wherein an outbound message is unsuccessfully sent if a retry response is received for the outbound message from the receiving agent.

3. (Original) The method of claim 2, wherein a retry response is received from the receiving agent for an outbound message if a buffer in the receiving agent that stores incoming messages does not have room for the outbound message.

4. (Original) The method of claim 1, wherein after receiving a successfully sent outbound message the receiving agent:

identifies a second node in the multi-node system that is capable of processing the successfully sent outbound message; and

sends the successfully sent outbound message to the second node.

5. (Original) The method of claim 1, wherein the outbound message is sent in a packet format.

6. (Currently Amended) A method of sending messages in a multi-node system, the method comprising:

receiving a retry response for an previously sent outbound message that is stored in an outbound buffer in a first node of a multi-node system, wherein the outbound buffer both stores an outbound message that has not yet been sent to the receiving agent and stores said previously sent outbound message;

determining that a threshold number of retry responses have been received for said previously sent ~~the~~ outbound message; and

preventing any new entries from being stored in the outbound buffer until all outbound messages currently stored in the outbound buffer have been both sent to a receiving agent and stored in an inbound buffer in the receiving agent.

7. (Original) The method of claim 6, wherein a retry response is received for the outbound message if the outbound message was sent to the receiving agent and there were no free locations in the inbound buffer in which to store the outbound message.

8. (Original) The method of claim 6, wherein said determining that a threshold number of retry responses have been received includes:

incrementing a retry counter associated with the outbound message; and

determining that the retry counter has reached a threshold.

9. (Original) The method of claim 6, wherein the outbound message is a memory related outbound message.

10. (Original) The method of claim 9, wherein the outbound message relates to snooping a cache memory that is part of a second node of the multi-node system.

11. (Currently Amended) A node controller comprising:

a buffer to store a plurality of outbound messages, wherein the buffer is to both store an outbound message that has not yet been sent and store an outbound message that was previously sent;

an output interface coupled to the buffer to send outbound messages from the node controller;

an input interface to receive retry responses; and

a buffer manager coupled to the input interface and having logic to determine that a threshold number of retry responses have been received for an outbound message that is stored in the buffer.

12. (Original) The node controller of claim 11, wherein each outbound message in the buffer has a retry counter, wherein the buffer manager has logic to increment the retry counter for an outbound message each time that a retry response is received for the outbound message, and wherein the buffer manager has logic to use the retry counter to determine that a threshold number of retry responses have been received.

13. (Original) The node controller of claim 11, wherein the buffer manager further comprises logic to prevent any outbound messages not currently stored in buffer from being sent until the successful sending of all outbound messages currently stored in the buffer has been confirmed.

14. (Original) The node controller of claim 12, wherein said logic to prevent any outbound messages from being sent includes logic to prevent the storage of new outbound messages in the buffer.

15. (Currently Amended) A system comprising:

a first node having a node controller that includes:

an outbound buffer to store a plurality of outbound messages,
wherein the buffer is to both store an outbound message that has not yet been sent and store an outbound message that was previously sent; and

an outbound buffer manager to prevent the storage of new outbound messages in the outbound buffer when a threshold number of retry responses has been received for a outbound message stored in the outbound buffer; and

a receiving agent coupled to said first node and including:

an inbound buffer to store a plurality of outbound messages; and

an inbound buffer manager to send a retry response to the first node if an outbound message is received from the first node and there are no free entries in the inbound buffer in which to store the outbound message.

16. (Original) The system of claim 15, wherein each outbound message stored in the inbound buffer has a retry counter, and wherein the inbound buffer manager contains logic to increment the retry counter for an outbound message each time a retry response is received for the outbound message.

17. (Original) The system of claim 16, wherein the outbound buffer manager further contains logic to prevent the storage of new outbound messages in the outbound buffer when the retry counter for an outbound message has reached a threshold.

18. (Original) The system of claim 15, wherein the first node further comprises a first processor that sends outbound messages to the node controller.

19. (Original) The system of claim 15, wherein the system further comprises a second node, and wherein the receiving agent further includes a routing manager to route outbound messages from the first node to the second node.

20. (Currently Amended) An article of manufacture comprising a computer-readable medium having stored thereon instructions adapted to be executed by a processor, the instructions which, when executed, cause the processor to manage outbound message sending by:

sending to a receiving agent an first outbound message that is stored in an outbound buffer in a node of a multi-node system, wherein the outbound buffer both stores an outbound message that has not yet been sent and stores said first outbound message;

receiving a retry response for the first outbound message~~sent~~;

determining that a threshold number of retry responses have been received for the first outbound message; and

preventing any new entries from being stored in the outbound buffer until all outbound messages currently stored in the outbound buffer have been both sent to the receiving agent and stored in an inbound buffer in the receiving agent.

21. (Original) The article of manufacture of claim 20, wherein the instructions for determining that a threshold number of retry responses have been received includes instructions to:

increment a retry counter associated with the outbound message; and

determine that the retry counter has reached a threshold.